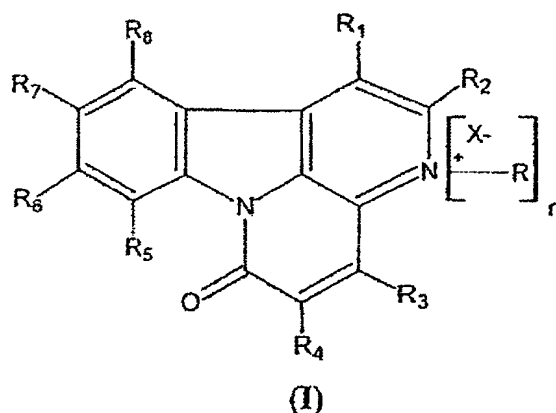


CLAIMS

1. The use, for producing a medicinal product intended for the treatment of trypanosomiasis, of a  
5 compound corresponding to formula (I):



in which R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> represent, independently of one another:

- 10 • a hydrogen atom
- a saturated or unsaturated, linear, branched or cyclic C<sub>1</sub>-C<sub>12</sub> alkyl group,
- a halogen atom chosen from chlorine, fluorine, bromine and iodine,
- 15 • a halo(C<sub>1</sub>-C<sub>12</sub>)alkyl group in which the alkyl chain may be linear, branched or cyclic, and saturated or unsaturated, and the halogen atom(s) is (are) chosen from fluorine, chlorine, bromine and iodine,
- 20 • a hydroxyl function,
- a nitro function -NO,
- a cyano function -CN,
- a function -SH,
- a carboxylic acid function -COOH,
- 25 • an amide function -CONH<sub>2</sub>,
- an amine function -NH<sub>2</sub>,
- a C<sub>1</sub>-C<sub>12</sub> alkoxy function in which the alkyl group may be linear, branched or cyclic, and saturated or unsaturated,

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- a C<sub>1</sub>-C<sub>12</sub> alkyl ester function, in which the alkyl group may be linear, branched or cyclic, and saturated or unsaturated,
  - 5       • a secondary or tertiary alkylamide function, in which the C<sub>1</sub>-C<sub>12</sub> alkyl group(s) may be linear, branched or cyclic, and saturated or unsaturated,
  - 10       • a secondary or tertiary alkylamine function, in which the C<sub>1</sub>-C<sub>12</sub> alkyl group(s) may be linear, branched or cyclic, and saturated or unsaturated,
  - 15       • a C<sub>1</sub>-C<sub>12</sub> alkylthio function, in which the alkyl group may be linear, branched or cyclic, and saturated or unsaturated,
  - 20       • a C<sub>2</sub>-C<sub>6</sub> heterocyclic group containing 1 to 4 hetero atoms chosen from sulfur, nitrogen and oxygen,
  - 25       • a group -SO<sub>2</sub>-NR'R'' or a group -NR'-SO<sub>2</sub>-R'', in which R' and R'' represent, independently of one another, a saturated or unsaturated, linear, branched or cyclic C<sub>1</sub>-C<sub>12</sub> alkyl group;  
n       represents 0 or 1;  
R       represents a saturated or unsaturated, linear, branched or cyclic C<sub>1</sub>-C<sub>12</sub> alkyl group;
  - 30       X<sup>-</sup> represents an anion that can be chosen from inorganic or organic anions.
2. The use as claimed in claim 1, characterized in that the compound of formula (I) is canthin-6-one.
- 30       3. The use of canthin-6-one for producing a medicinal product intended for the treatment of trypanosomiasis as claimed in claim 2, characterized in that the canthin-6-one is present
- 35       in the form of a plant extract.
4. The use as claimed in claim 3, characterized in that the canthin-6-one is present in the form of

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an extract of a plant chosen from: *Ailanthus altissima*, *Brucea antidysenterica*, *Eurycoma harmandiana*, *Peganum nigellastrum*, *Zanthoxylum elephantiasis* and *Zanthoxylum chiloperone*.

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5. The use as claimed in claim 4, characterized in that the canthin-6-one is present in the form of an extract of *Zanthoxylum chiloperone* var. *angustifolium*.

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6. The use as claimed in any one of claims 1 to 5, for producing a medicinal product intended for the treatment of trypanosomiasis in its chronic phase and its acute phase.

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7. The use as claimed in any one of claims 1 to 5, for producing a medicinal product intended for the treatment of Chagas' disease.

20

8. The use as claimed in any one of the preceding claims 1 to 6, characterized in that it is intended for the treatment of trypanosomiasis caused by the agent *Trypanosoma brucei*.

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9. The use as claimed in any one of the preceding claims 1 to 7, characterized in that it is intended for the treatment of trypanosomiasis caused by the agent *Trypanosoma cruzi*.

30

10. The use as claimed in claim 5, characterized in that the plant extract containing the canthin-6-one is obtained by means of a method comprising a first step that consists in grinding the dried bark of the trunk of *Zanthoxylum chiloperone* var. *angustifolium*, and then in treating it with an aqueous alkaline solution.

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11. The use as claimed in claim 10, characterized in

that the plant extract containing the canthin-6-one is obtained by means of a method comprising a second step consisting of extraction with a chlorinated organic solvent.

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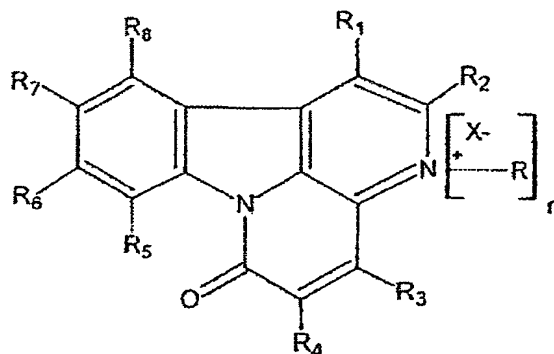
12. The use as claimed in any one of the preceding claims 1 to 11, characterized in that the medicinal product is intended to be administered at a dose of between 0.01 and 100 mg/kg/d of compound of formula (I), preferably between 0.1 and 50 mg/kg/d, even more preferably between 1 and 20 mg/kg/d.

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13. The use as claimed in any one of the preceding claims, characterized in that the medicinal product is intended to be administered orally.

15

14. A compound corresponding to formula (I):



(I)

20 in which R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> represent, independently of one another:

- a hydrogen atom
- a saturated or unsaturated, linear, branched or cyclic C<sub>1</sub>-C<sub>12</sub> alkyl group,
- 25 • a halogen atom chosen from chlorine, fluorine, bromine and iodine,
- a halo(C<sub>1</sub>-C<sub>12</sub>)alkyl group in which the alkyl chain may be linear, branched or cyclic, and saturated or unsaturated, and the halogen

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- atom(s) is (are) chosen from fluorine, chlorine, bromine and iodine,
- a hydroxyl function,
  - a nitro function -NO,
  - 5     • a cyano function -CN,
  - a function -SH,
  - a carboxylic acid function -COOH,
  - an amide function -CONH<sub>2</sub>,
  - an amine function -NH<sub>2</sub>,
  - 10    • a C<sub>1</sub>-C<sub>12</sub> alkoxy function in which the alkyl group may be linear, branched or cyclic, and saturated or unsaturated,
  - a C<sub>1</sub>-C<sub>12</sub> alkyl ester function, in which the alkyl group may be linear, branched or cyclic, and saturated or unsaturated,
  - 15    • a secondary or tertiary alkylamide function, in which the C<sub>1</sub>-C<sub>12</sub> alkyl group(s) may be linear, branched or cyclic, and saturated or unsaturated,
  - 20    • a secondary or tertiary alkylamine function, in which the C<sub>1</sub>-C<sub>12</sub> alkyl group(s) may be linear, branched or cyclic, and saturated or unsaturated,
  - a C<sub>1</sub>-C<sub>12</sub> alkylthio function, in which the alkyl group may be linear, branched or cyclic, and saturated or unsaturated,
  - 25    • a C<sub>2</sub>-C<sub>6</sub> heterocyclic group containing 1 to 4 hetero atoms chosen from sulfur, nitrogen and oxygen,
  - 30    • a group -SO<sub>2</sub>-NR'R'' or a group -NR'-SO<sub>2</sub>-R'', in which R' and R'' represent, independently of one another, a saturated or unsaturated, linear, branched or cyclic C<sub>1</sub>-C<sub>12</sub> alkyl group;
  - n     represents 0 or 1;
  - 35    R    represents a saturated or unsaturated, linear, branched or cyclic C<sub>1</sub>-C<sub>12</sub> alkyl group;
  - X<sup>-</sup>    represents an anion that can be chosen from inorganic or organic anions,

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at least one of  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$  and  $R_8$  being different from H, or else  $n = 1$ .

15. The compound as claimed in claim 14, characterized  
5 in that  $X^-$  is chosen from: the  $Cl^-$  ion, the  $Br^-$  ion, the  $I^-$  ion, the  $S^-$  ion, the  $PO_3^-$  ion, the  $NO_3^-$  ion, the acetate ion, the oxalate ion, the tartrate ion, the succinate ion, the maleate ion, the fumarate ion, the gluconate ion, the citrate  
10 ion, the malate ion, the ascorbate ion and the benzoate ion.
16. The compound as claimed in claim 14 or claim 15,  
15 characterized in that one or more of the conditions below are satisfied:
- $R_3$  represents an  $NH_2$  group or a  $C_1$ - $C_{12}$  alkylamine group or a  $C_1$ - $C_{12}$  alkylamide group or a  $C_2$ - $C_6$  heterocycle comprising at least one amine function;
  - 20 -  $R_4$  represents a hydroxyl group or a  $C_1$ - $C_{12}$  alkoxy group;
  - $R_1 = R_2 = R_5 = R_6 = R_7 = R_8 = H$ .
17. The compound as claimed in any one of claims 14 to  
25 16, characterized in that one or more of the conditions below are satisfied:
- $R_3$  represents an  $NH_2$  group or a  $C_1$ - $C_6$  alkylamine group or a  $C_1$ - $C_6$  alkylamide group or a  $C_2$ - $C_6$  heterocycle comprising at least one  
30 amine function;
  - $R_4$  represents a hydroxyl group or a  $C_1$ - $C_6$  alkoxy group;
  - $R_1 = R_2 = R_5 = R_6 = R_7 = R_8 = H$ .
- 35 18. The compound as claimed in any one of claims 14 to 17, characterized in that one or more of the conditions below are satisfied:
- $R_3$  represents an  $NH_2$  group;

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- $R_4$  represents an  $\text{OCH}_3$  group;
  - $R_1 = R_2 = R_5 = R_6 = R_7 = R_8 = \text{H}$ .
19. The compound as claimed in any one of claims 14 to  
5 18, characterized in that  $R_1 = R_2 = R_3 = R_4 = R_5 = R_6 = R_7 = R_8 = \text{H}$  and  $n = 1$ , and R is a  $\text{C}_1\text{-C}_6$  alkyl group.
20. The compound as claimed in any one of claims 14 to  
10 18, characterized in that it is chosen from:
- 4-aminocanthin-6-one;
  - N-methylcanthin-6-one iodide;
  - 5-methoxycanthin-6-one.
- 15 21. A medicinal product, characterized in that it comprises a compound as claimed in any one of claims 14 to 20, in a pharmaceutically acceptable support.